



# Focus on Urology

## This Issue: Focus on Benign Prostatic Hyperplasia

This is the first issue of *Focus on Urology* from Monterey Bay Urology Associates. Our goal is to provide you with useful information on clinical topics in urology that you can use with your patients on a daily basis. Each issue will highlight one topic; this issue focuses on state-of-the-art treatment of BPH. Please give us feedback about the value of the information to your practice and input on topics for future issues.....*MBUA Urology Staff*

## Randomized trial shows Transurethral Needle Ablation of the prostate is equally effective and safer than TURP

TURP has been the gold standard treatment for BPH for the past 50 years. It has a long track record of success, but is an invasive, inpatient procedure with a significant risk of side effects, including retrograde ejaculation, incontinence, transfusion, impotence and others. Transurethral needle ablation of the prostate (TUNA<sup>®</sup>, Medtronic Corp.) is a minimally invasive alternative to medication or TURP for symptomatic BPH. Patients and physicians are increasingly interested in minimally invasive treatments, but need to know if these outpatient treatments are as safe and effective as the standard surgical therapy. A recent randomized trial compared the effectiveness and safety of TURP and TUNA, and concluded that TUNA is equally effective as TURP in relieving BPH symptoms with much fewer side effects.

Cimentepe et. al. (Journal of Endourology, March 2003;17(2):103-7) randomized 59 patients to TUNA versus TURP. Both TUNA and TURP provided significant increase in urinary flow rate, decrease in post-void residual, and improvement in quality of life (QOL) and International Prostate symptom scores (IPSS). The increase in flow rate was greater with TURP than TUNA, but the improvement in QOL and IPSS were the same with TURP and TUNA. There were no complications associated with TUNA, but 48% of the men who underwent TURP had retrograde ejaculation, 12%

became impotent, 6% had urethral strictures, and 3% became incontinent. The authors concluded "TUNA...is an effective and safe minimally invasive treatment with negligible adverse effect for selected patients with symptomatic BPH compared to TURP." These recommendations echo the American Urological Association's BPH guidelines, which state "...there are now many acceptable alternatives to TURP that are less costly per treatment episode...and that have less associated morbidity."

TUNA uses radiofrequency energy to heat the enlarged, inner part of the prostate (see drawing on page 3). The RF energy is delivered through a special cystoscope that has a pair of needles that penetrate into the enlarged part of the prostate. The BPH tissue is heated to 110° C for 4 minutes, resulting in a "lesion" of ablated tissue, which slowly shrinks over 6-12 weeks. The depth of needle deployment can be varied, and more "lesions" can be performed in larger prostates, so TUNA offers the flexibility to treat the vast majority of men with BPH. TUNA can be performed in the office or outpatient surgery center with local anesthesia or intravenous sedation, and most men have a catheter for only one night. Approximately 80% of men get significant symptomatic improvement, and long-term studies show that the improvement lasts for at least 5-8 years in 80-90% of patients.

Monterey Bay Urology Associates has been



Greenlight PVP  
Laser.

## Outpatient TURP is safe and effective with the Greenlight PVP™ Laser TURP!

Transurethral resection of the prostate has been the gold standard treatment for symptomatic BPH for the past 50 years. The standard TURP has changed little over these decades, and still provides excellent patient outcomes. The downside of TURP is the risk of bleeding, transfusion, fluid absorption, incontinence, and the need for inpatient hospitalization. Most of these risks are eliminated with the Greenlight PVP™ laser TURP (Laserscope, Inc.), which vaporizes the inner prostate and provides the same improvement in urinary flow and symptoms as the standard TURP

with a fraction of the risk. The Greenlight PVP laser causes minimal bleeding, which allows a more precise and complete resection of the prostate, even in men on Coumadin. Most patients can be discharged home the same day, many without a catheter. Numerous clinical studies have documented its effectiveness, and it is likely to replace the electro-surgical TURP as the standard surgical treatment for BPH. MBUA urologists are experienced with this procedure, and are happy to discuss this revolutionary procedure with you and your patients.

## MTOPS Trial demonstrates benefits of combination medical therapy for BPH



*"MTOPS demonstrated unequivocally that the combination...is superior to monotherapy with respect to BPH symptom relief"*  
Claus Roehrborn, M.D.

The Medical Therapy of Prostate Symptoms (MTOPS) trial compared the effects of a prostate-specific alpha-blocker (tamsulosin, Flomax®) and a 5-alpha reductase inhibitor (finasteride, Proscar®) as monotherapy or as combination therapy for relief of BPH symptoms and prevention of disease progression. The four arm, multicenter trial randomized 3,047 men with BPH to placebo, Flomax, Proscar, or the combination of Flomax and Proscar. Symptom progression was defined as an increase in AUA symptom score of more than 4 points, acute urinary retention, urinary incontinence, renal insufficiency, or recurrent urinary tract infection. All three of the treatment arms showed a significant improvement in urinary symptoms, with the monotherapy arms showing

a 34-39% lower risk of progression of symptoms than the placebo arm. The combination therapy arm showed a 66% lower risk of symptom progression, which was a significantly lower risk than seen with Proscar ( $p < 0.001$ ) or Flomax ( $p < 0.001$ ) alone. The risk of acute urinary retention or need for invasive surgery was significantly lowered by combination therapy or Proscar ( $p < 0.001$ ), but not by Flomax alone.

Should all men with BPH be placed on combination therapy? The risks and benefits of combination therapy should certainly be discussed with men interested in BPH therapy. Flomax or other alpha-blockers provide prompt symptom relief and has few side effects. 5-alpha reductase inhibitors provide long-term relief of urinary symptoms, but can cause decreased ejaculate volume

## MTOPS Trial continued

and mild breast tenderness. Patients with lower risk of progression of BPH symptoms may not want the additional cost and side effects associated with the use of 5-alpha reductase inhibitors. Patients with prostate volumes greater than 40 cc, PSA elevation secondary to BPH, elevated post void residual, or high AUA symptom scores are at

higher risk for disease progression and therefore may benefit more from combination medical therapy. Further studies are needed to determine if initial combination therapy followed by long-term 5 alpha reductase inhibitors can provide cost-effective relief of BPH symptoms.



TUNA procedure for BPH

## Herbal Treatments for BPH-Do they work, and how?

The use of Saw Palmetto and other herbal preparations for prevention or treatment of prostate disease has increased dramatically around the world over the past several decades. But do these over-the-counter treatments really work?

The answer to that question depends on the reason that these herbal preparations are taken. Many of these herbal preparations claim to promote "prostate health." But "prostate health" is a vague, undefined quality, and there are no standard ways to measure the general health of the prostate. There is no evidence that Saw Palmetto prevents prostate enlargement or prostate cancer, and a recent randomized trial showed that finasteride was superior to Saw Palmetto in treating chronic prostatitis.

There is substantial evidence, however, regarding the impact of herbal preparations on urinary symptoms related to BPH. Two recent randomized, placebo controlled trials conducted in Europe compared the lipido-sterolic extract of Saw Palmetto (Permixon) to finasteride (Proscar®) and tamsulosin (Flomax®). Both trials showed equivalent improvement in symptom score, flow rate, and quality of life. A recent meta-analysis of published trials of Saw Palmetto

extracts concluded that the majority of the trials showed benefit in urinary symptoms that was similar to conventional drug therapy.

Other recent trials cast some doubt on the relative efficacy of Saw Palmetto. The OCOS trial randomized 329 men to tamsulosin plus placebo or Saw Palmetto, and found no difference in symptom score, flow rate, or quality of life scores. The authors of the OCOS trial concluded that the addition of Saw Palmetto to tamsulosin did not provide any significant benefit. This study did not include a Saw Palmetto plus placebo arm, so it did not directly compare Saw Palmetto and tamsulosin as monotherapy for BPH. A recent study found that a majority of men who had no benefit from Saw Palmetto did have significant improvement from tamsulosin.

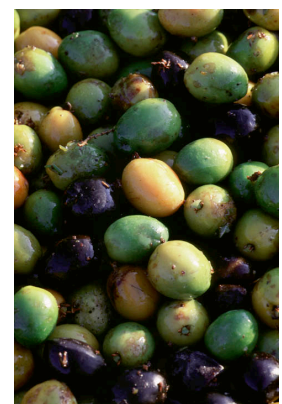
A possible explanation for the outcomes of these studies may lie in the Saw Palmetto preparations used. Permixon is a standardized extract of Saw Palmetto and may be more efficacious than less standard extracts sold on the market in the U.S.

The mechanism by which Saw Palmetto works is also in doubt. Randomized trials have shown that Saw Palmetto is superior to placebo in reduction of BPH symptoms, but

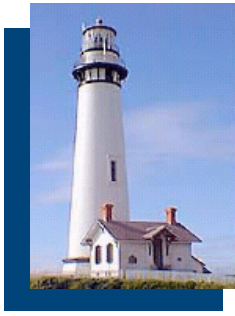


*"...there are now many acceptable alternatives to TURP that are less costly per treatment episode...and that have less associated morbidity."*

*American Urological Association BPH Guidelines*



Saw Palmetto Berries



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**Saw Palmetto for BPH**

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produced no difference in prostate size or PSA levels. Other studies have shown that Saw Palmetto causes atrophy of prostatic epithelial cells, but the mechanism is unclear and may be a process distinct from anti-androgenic properties.

At Monterey Bay Urology we

support the use of herbal preparations if men are bothered by symptoms of BPH, but encourage them to consider medications or minimally invasive therapy if they do not have results within a few months. We are skeptical of the preventive role of phytotherapy for "prostate health" in most men.

**Daily, prostate-selective alfuzosin now available for BPH**

Uroxatral® (alfuzosin), a once-daily prostate-selective alpha-blocker is now available for treatment of symptomatic BPH. Alfuzosin has been used in Europe for a decade, but

it was not marketed in the U.S. until recently. Uroxatral has efficacy similar to tamsulosin (Flomax) with a lower incidence of retrograde ejaculation and other sexual side effects.

**TUNA versus TURP**

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performing TUNA for BPH since 1995, and our experience confirms the effectiveness and safety of TUNA. We believe TUNA is an excellent alternative to long-term use of daily medication or to TURP for men who do not want retrograde ejaculation or other risks associated with TURP, or for men who are poor surgical candidates. More information about TUNA is available at [www.montereybayurology.com](http://www.montereybayurology.com). Please feel free to direct patients to the website or call for a consultation.

**About Monterey Bay Urology Associates...**

Monterey Bay Urology Associates is committed to providing state-of-the-art urologic care to patients in Santa Cruz County. We are proud to be the leaders in our community in laparoscopic urologic surgery, minimally invasive prostate surgery, urologic oncology, female urology, and vasectomy/vasectomy reversal. We are happy to consult with you and your patients at any time.

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